



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/237,605	01/25/1999	RICHARD J. LAZZARA	IMPI.035-1	7280

30223 7590 04/05/2006

JENKENS & GILCHRIST, P.C.  
225 WEST WASHINGTON  
SUITE 2600  
CHICAGO, IL 60606

EXAMINER

PREBILIC, PAUL B

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/237,605  
Filing Date: January 25, 1999  
Appellant(s): LAZZARA ET AL.

**MAILED**

**APR 05 2006**

**Group 3700**

---

Daniel J. Burnham  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 16, 2005 appealing from the Office action mailed July 27, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The Appellants' statement of the status of amendments after final rejection contained in the brief is correct. The amendment filed along with the Appeal Brief has been entered.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. However, the explanation provided may not be in the format that the Board of Appeals desires. The ground could better be stated as:

Claims 51 and 60-75 stand rejected under 35 USC 103(a) as being unpatentable over Hauruyki et al (the translation of Japanese patent JP3146679A2) in view of Niznick (US 5,571,017).

Art Unit: 3738

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

JP3146679A2	HARUYUKI et al**	6-1991
5,571,017	NIZNICK	11-1996

**\*\*Appellants did not provide a copy of the English language abstract to the Japanese patent, so the Examiner has attached a copy of it to this Examiner's Answer.**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections Based Upon 35 USC 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51 and 60-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruyuki et al (the translation of Japanese patent JP3146679A2) in view of Niznick (US 5,571,017).

Haruyuki discloses an acid etched titanium implant surface with recesses having average depths of 0.5 to 5 microns; see the English language abstract and the "Technical Field" paragraph on page 2. Haruyuki discloses making dental repair and biorepair members including bone fixation devices and artificial dental roots, but fails to disclose implants made with the macrofeatures of a head, a threaded portion and a lowermost end as claimed. However, Niznick teaches that it was known in the art to have different regions of roughness (where the roughened portion begins below the top surface), a tapered section, a smooth head portion, a lowermost end and a self-tapping feature; see the abstract, Figure 1, column 2, lines 1-12, column 2, line 66 to column 3, line 24, column 4, lines 22-37, column 4, line 56 to column 5, line 6, and column 7, lines 9-24. Hence, it is the Examiner's position that it would have been obvious to have a smoother head portion, a threaded portion and a lowermost end in the Haruyuki invention for the same reasons that Niznick has the same.

With regard to the limitation pertaining to the minimum consumption of metal, the Examiner asserts that this process step would not affect the final surface property, and thus, the resultant product would be the same as one where there was a more than minimum consumption of metal; see MPEP 2113, which is incorporated herein by reference thereto.

With regard to claimed etching process steps that are considered to be product-by-process limitations, the Examiner posits that since a similar type of etching process is used to form irregularities on the surface of the same material as claimed that the surface irregularities of Haruyuki that Haruyuki's surfaces would inherently be the same

Art Unit: 3738

as those set forth in the claims; i.e. cone-shaped and/or spaced about the prescribed distance.

Furthermore, upon review of Exhibit 1 and Exhibit B, Comparative Example 2 of the Dr. Gubbi declaration filed June 30, 2003, the Examiner concluded that the prior art treatments do result in cone-shaped elements; see the artifact folder color micrographs of Exhibit A (3D surface map of Appellants' Osseotite) thereof and compare to the color micrographs of Exhibit A of Examples 2 to 5 (3D surface maps of surfaces treated according to Haruyuki's treatment process). Thus, this evidence is used as evidence that cone-shaped elements are inherently present on the surface of Haruyuki.

#### **(10) Response to Argument**

Appellants argue that the surfaces treated according to Haruyuki's result in a different surface topography by stating "*it is clear that the surfaces have a topography different from the Applicant's surface*"; see page 7, last four lines of the Appeal Brief filed August 16, 2005. However, as pointed out in the rejection, the Examiner does not see any clear difference between the two, to the extent that one looking at one or the other would not know if Haruyuki's or Appellants' treatment method was used.

Furthermore, the claims only require that the surfaces have "a substantially uniform array of irregularities having peak-to-valley heights not greater than about 10 microns."

The Examiner asserts that these limitations are met in all the micrographs utilizing Haruyuki's process; see the micrographs of Examples 2 to 5.

Additionally, the claimed product-by-process steps are quite broad such that they are not commensurate in scope with the process steps used to make Appellants' samples; see the First Test-Osseotite on page 2 of the Dr. Gubbi's declaration filed June 30, 2003. From the description of the process, it is clear that very specific concentrations and treatment times were used that do not clearly exemplify a trend in the evidence; see MPEP 716.02(d) that is incorporated herein by reference. For these reasons, the Examiner asserts that evidence does clearly does not support conclusion of unobviousness.

In response to the arguments directed against the Haruyuki rejection that Haruyuki uses acid treatment to smoothen the surface not roughen it, the Examiner asserts that Haruyuki does not teach smoothening the surface. Rather, Haruyuki explains that there is an optimum surface characteristic to obtain for cell adhesion and ongrowth. Acid treatment with a too strong acid (over 6% HF) leads to too large of pores sizes while a too weak acid (under 1% HF) leads to too small of pores sizes; see page 4, left column of the translation. Smoothness is not explicitly discussed. Rather, only rough edges and pores sizes are discussed. Furthermore, the fact that Haruyuki wants to optimize pores size and depth to promote cell attachment does not teach away from Niznick, but instead teaches a way of achieving what both references desire: cell attachment and ongrowth.

Furthermore, the Examiner asserts that since both references are concerned with rough surfaces for the purpose of ongrowth and ingrowth that the different dimensions alone do not make them incompatible. Disclosed embodiments or preferred

Art Unit: 3738

embodiments do not constitute a teaching away; see MPEP 2123 (II) that is incorporated herein by reference.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

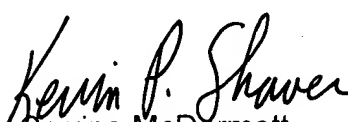
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Paul Prebilic  
Primary Examiner  
Art Unit 3738

Conferees:

 for Corrine McDermott  
Corrine McDermott  
Supervisory Patent Examiner  
Art Unit 3738

John Calvert  
Supervisory Patent Examiner  
Art Unit 3738

  
JOHN J. CALVERT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700